

> Denotes revised material in this JPM

JOB PERFORMANCE MEASURE

TASK CODE: CFO-192

TASK: Operate the Tennelec Series 5 XLB Counter

NAME: _____ **BADGE #** _____

REFERENCES: >Only references for knowledge items are listed here. The trainee is expected to identify the correct references for practical items

1. WP 12-HP1245, Tennelec Series 5 XLB Low Background Alpha/Beta Counting System Calibration, Operation, and Maintenance
2. Eclipse LB Software Operation Manual
3. Tennelec Series 5 Service Manual
4. Tennelec Series 5 XLB and HP Installation and Operational Verification
5. NFS-RPS Swipes/Air Quality Software Manual

TERMINAL OBJECTIVE:

Given an air sample filter and a contamination smear sample, analyze both utilizing the Tennelec Series 5 XLB counting system IAW WP 12-HP1245

CONSEQUENCES OF INADEQUATE PERFORMANCE:

Improper survey results

HAZARDS (PERSONNEL/EQUIPMENT STATUS):

Pinch Points from moving mechanical parts

PRE-REQUISITE TRAINING/ TASK COMPLETION:

- >1. CL 2.19, Counting Room Equipment OR CF 3.11, Proportional Counting.
2. CFO-156, Control Radioactive Sources
3. SAF-619, Compressed Gas Cylinder Safety

TOOLS/EQUIPMENT (MATERIALS REQUIRED):

- | | |
|--|----------------------------------|
| 1. Tennelec Series 5 XLB | 5. Pu-239 source |
| 2. P-10 Gas | 6. Sr/Y-90 source |
| 3. Tennelec Series 5 XLB Technical Manuals | 7. Group, End, and Sample plates |

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4. Attachment 3 of WP 12-HP1245

Instructions to Trainee: You shall acquire the necessary references and equipment, and complete all required documentation. Knowledge requirements shall be completed with 80% or greater accuracy. Critical step performance shall be completed with 100% accuracy.

Instructions to JPM Evaluator: The trainee is to perform the terminal objective, without assistance, on the job site. Provide clarification of requirements if requested by the trainee. You are encouraged to ask relevant questions to verify trainee understanding. If the trainee fails this JPM, clearly document the reason for failure and forward to the trainee's manager. Successful completion of this JPM shall be recorded on the trainee's qualification card.

>On performance items, if there is more than one means available to accomplish the step, circle the method used. Refer to the RCT-01 Qualification Standard for preference of use.

KNOWLEDGE REQUIREMENTS:

| >Reference | Knowledge Requirement | Pass/Fail |
|------------|---|-----------|
| 1 | State the required Quality Control (QC) checks and their respective frequencies. | |
| 2, 3, 4 | Describe the operation of the Tennelec Series 5 XLB. | |
| 1, 2, 3 4 | State the precautions associated with the operation of the Tennelec Series 5 XLB. | |
| 1, 5 | State which 2 plates must be used for every sample count. | |
| 1 | State actions to be taken if the instrument has a deficiency that would offset it's proper operation. | |
| 2, 6 | Discuss the capabilities of the Eclipse LB and NFS-RPS interfaces used for operation. | |

PERFORMANCE REQUIREMENTS:

| Method | Performance Requirement | Pass/Fail |
|--------|-------------------------------------|-----------|
| P # | Startup the Tennelec Series 5 XLB. | |
| P # | Perform QC checks | |
| P | Analyze QC Report for Abnormalities | |
| P | Load samples into changer. | |

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| Method | Performance Requirement | Pass/Fail |
|--------|--|-----------|
| P# | Analyze samples using the Tannelec Series 5 XLB | |
| P | Operate the Tannelec Series 5 XLB in the manual mode | |
| P | Complete required documentation for QC checks | |
| P# | Review analysis results for abnormalities. | |

indicates a critical step

FINAL EVALUATION:

PASS

FAIL

COMMENTS:

EVALUATOR SIGNATURE:

_____ **DATE:** _____

TRAINEE SIGNATURE:

_____ **DATE:** _____

MANAGER SIGNATURE:

_____ **DATE:** _____